

Occupancy Workshop at ARMI EOY Meeting

Draft Program

Day 1

8:30am Background

- why, what and how to monitor
 - populations and scope of inference
 - strength of inference
 - experiments
 - quasi-experiments
 - observational studies
 - pattern vs process
 - occupancy applications
 - statistical methods
 - likelihood-based approaches
 - model fit
 - multi-model inference
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10:30am BREAK

11:00am Single-season model

- basic model
 - missing observations
 - model assumptions
 - covariates
 - dealing with heterogeneity
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12:30pm LUNCH

1:30pm Worked single-season examples and computer exercises

3:00pm BREAK

3:30pm Single-season study design

- site selection
 - how to determine allocation of effort
 - design comparisons
 - timing of surveys
 - miscellaneous issues
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Day 2

8:30am Multiple-season model

- basic model
- missing observations
- covariates
 - types of changes in occupancy

Worked multiple-season examples and computer exercises

10:30am BREAK

11:00am Multiple-season study design

- relationship with single-season designs
 - long-term desing
 - effect of adding sites to study over time
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12:30pm LUNCH

1:30pm Other extensions and applications

- species co-occurrence
 - species richness or biodiversity
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3:00pm BREAK

3:30pm Consulting session

- analyze own data
 - ask specific questions of the instructors
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